

Claims

1. A data communication method in a communication system, comprising:
 - transmitting and receiving speech and/or data by means of a mobile device of the communication system and by using a predetermined transmission resource,
 - determining the location of the mobile device of the communication system,
 - transmitting, with the speech or data, information about the location of the mobile device to a predetermined group of users by using the predetermined transmission resource.
2. The method of claim 1, wherein the determining step further comprises: determining the location in the mobile device.
3. The method of claim 1, wherein the determining step further comprises: determining the location using a satellite positioning system.
4. The method of claim 1, further comprising: establishing a packet switched connection between the mobile device and a network element of the communication system as the predetermined transmission resource.
5. The method of claim 1, further comprising: transmitting information about the location in response to a command given by the user of the device.
6. The method of claim 1, further comprising:
 - detecting a change in the location of the mobile device;
 - transmitting information about the location on the basis of the detection.
7. The method of claim 1, wherein the mobile device is participating a group call.
8. The method of claim 7, wherein the predetermined group of users is participating in a group call.
9. The method of claim 1, wherein at least one user of the predetermined group of users receives the information about the location using a mobile device.
10. The method of claim 1, wherein at least one user of the predetermined group of users receives the information about the location by using a personal computer.

11. The method of claim 4, wherein at least one packet comprising information about the location replaces at least one speech or data packet.

12. The method of claim 4, wherein at least one packet comprising information about the location is transmitted among speech or data packets.

13. The method of claim 4, wherein each packet comprises information about whether it contains speech, data or information about the location of the mobile device.

14. The method of claim 1, wherein the information about the location of the mobile device is sent as a separate message.

15. The method of claim 7, further comprising:

detecting a pressing of a predetermined key of the mobile device, activating speech transmission on the basis of the detection.

16. The method of claim 15, further comprising:

transmitting information about the location of the mobile device at the beginning of the transmission before speech or data.

17. The method of claim 15, further comprising:

transmitting information about the location of the mobile device in a predefined part of the transmission.

18. The method of claim 1, further comprising:

receiving a location query from the system, and

determining and transmitting information about the location of the mobile device in response to the query.

19. The method of claim 7, wherein

each device participating in the group call transmits information about its location to a predetermined participant in the group call, and

the predetermined participant in the group call transmits the information about the location of each device to all participants.

20. The method of claim 1, wherein the time when location was determined is included in the location information.

21. The method of claim 1, wherein the method with which the location was determined is included in the location information.

22. The method of claim 1, further comprising:

transmitting location information to a network server connected to the communication system, and

storing location information in the network server.

23. The method of claim 1, wherein the location information is sent without intervention by the user of the device.

24. The method of claim 1, wherein the information about the location of the mobile device is used as input information for an application running in a mobile device or a computer.

25. The method of claim 1, wherein predefined privacy levels assigned to predetermined groups or to users belonging to predetermined groups are taken into account in the transmission of information about the location of the mobile device.

26. The method of claim 1, wherein transmission of location related information is triggered by an external event detected by a sensor of the mobile device.

27. The method of claim 1, wherein transmission of location related information is triggered by a voice command or a sound.

28. A mobile device, comprising
determining means to determine the location of the mobile device,
and

transmitting means connected to the determining means to transmit speech and/or data by using a predetermined transmission resource and to transmit information about the location of the mobile device by using the same predetermined transmission resource.

29. The mobile device of claim 28, further comprising means to establish a packet switched connection between the mobile device and a network element of a communication system as the predetermined transmission resource.

30. The mobile device of claim 28, further comprising means to determine the location of the mobile device using a satellite positioning system.

31. The mobile device of claim 28, further comprising means to determine the location of the mobile device using an inertia navigation arrangement.

32. The mobile device of claim 28, further comprising
a keyboard with at least one key,
means to detect a pressing of a predetermined key of the keyboard,
means to activate speech transmission on the basis of the detection.

33. The mobile device of claim 28, wherein the transmitting means are configured to transmit information about the location of the mobile device at the beginning of the transmission before speech or data.

34. The mobile device of claim 28, wherein the transmitting means are configured to transmit information about the location of the mobile device in a predefined part of the transmission.

35. A telecommunication system, comprising mobile devices and at least one network element, the system comprising

means to determine the location of a mobile device,

transmitting means in the mobile device to transmit speech and /or data to the network element by using a predetermined transmission resource, and to transmit information about the location of the mobile device by using the same predetermined transmission resources.

36. The system of claim 35, further comprising a network element configured to act as a group management server and at least two mobile devices configured to participate in a group call.

37. The system of claim 35, wherein the system comprises

mobile devices comprising a keyboard with at least one key, means to detect a pressing of a predetermined key of the keyboard, and means to signal a transmission request to the network element on the basis of the detection, wherein

the network element is configured to receive the request and allocate transmission turns between the mobile devices on the basis of the requests received from the mobile stations.

38. The system of claim 35, further comprising:

a network server configured to receive information about the location of the mobile device, and

a network server configured to store the information.

39. The system of claim 35, further comprising:

a network server configured to transmit location information relating to a mobile device to a group of other devices.

40. The system of claim 35, wherein

the time when the location was determined and the method with which the location was determined are included in the location information.

41. The system of claim 38, further comprising:

a network server configured

to receive a location information request,
to send location information updated within a given time limit as a response to the request,
and to request the updating of location information not updated within the given time limit.

42. A computer program product encoding a computer program of instructions for executing a computer process for data communication in a mobile device, the process comprising:

providing transmission and reception of speech and/or data by using a predetermined transmission resource,

determining the location of the mobile device of the communication system,

providing, with the speech or data, transmission of information about the location of the mobile device to a predetermined group of users by using the predetermined transmission resource.

43. A computer program distribution medium readable by a computer and encoding a computer program of instructions for executing a computer process for data communication in a mobile device, the process comprising:

providing transmission and reception of speech and/or data by using a predetermined transmission resource,

determining the location of the mobile device of the communication system,

providing, with the speech or data, transmission of information about the location of the mobile device to a predetermined group of users by using the predetermined transmission resource.

44. The computer program distribution medium of claim 43, the distribution medium comprising a computer readable medium, a program storage medium, a record medium, a computer readable memory, a computer readable software distribution package, a computer readable signal, a computer readable telecommunications signal, and a computer readable compressed software package.